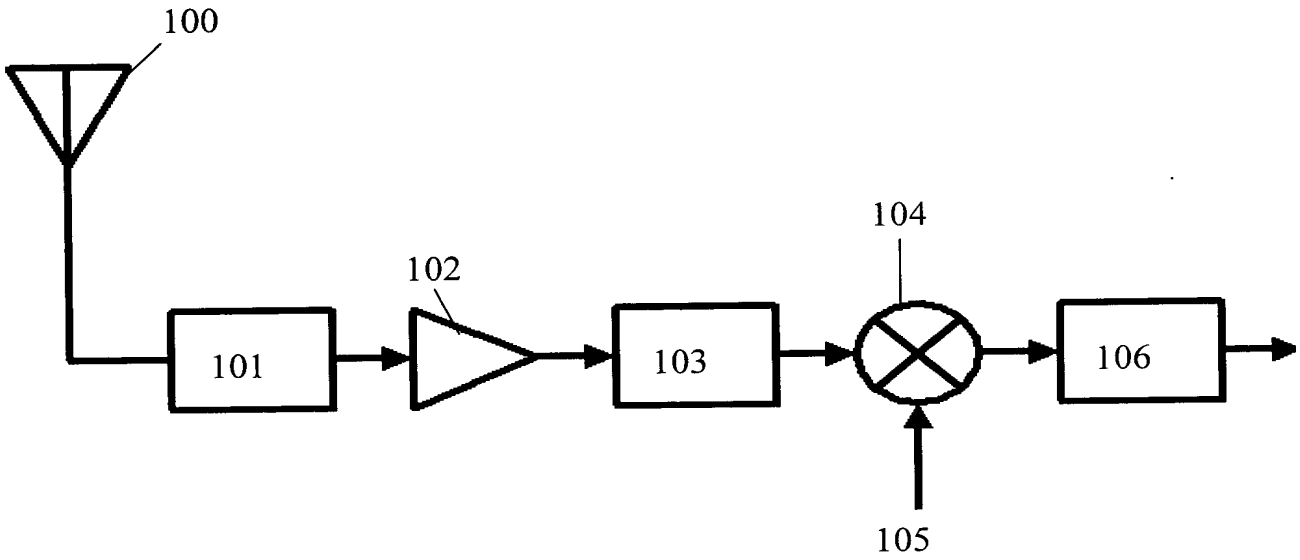

Fig. 1(Prior Art)

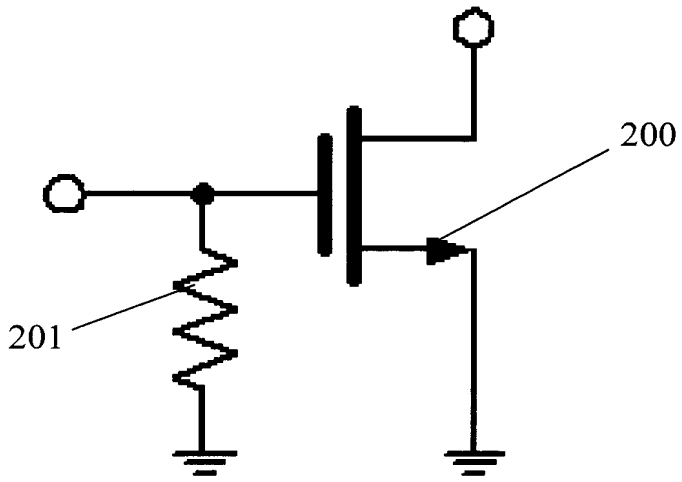

Fig. 2a(Prior Art)

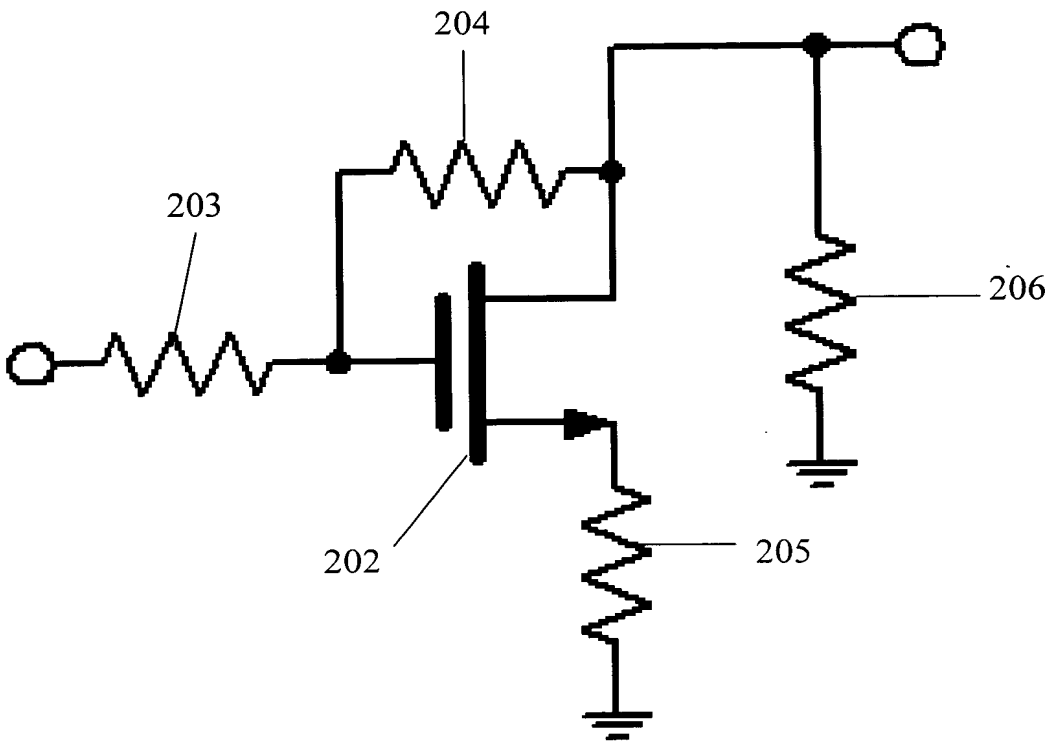

Fig. 2b(Prior Art)

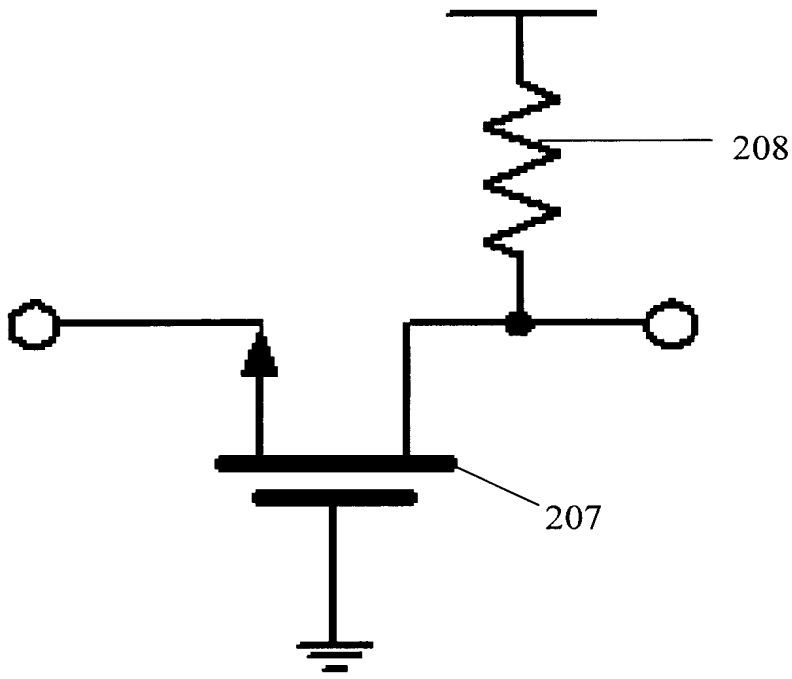

Fig. 2c(Prior Art)

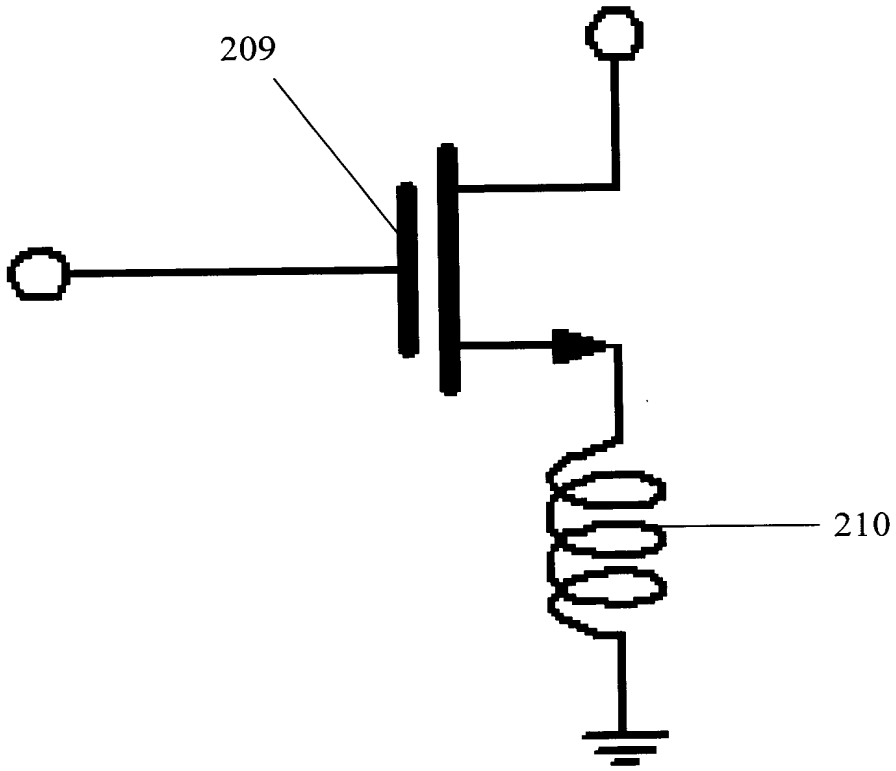

Fig. 2d(Prior Art)

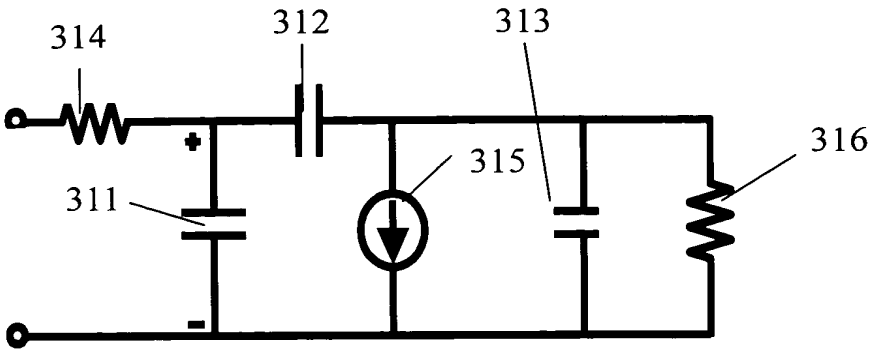

Fig. 3a

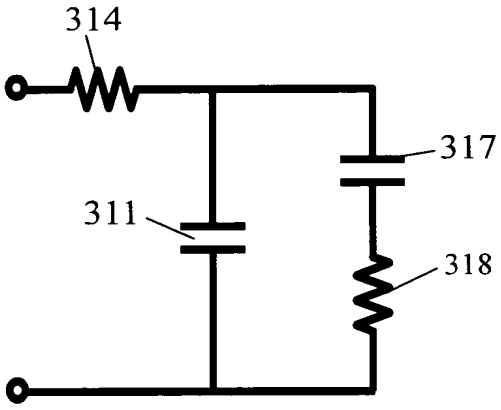

Fig. 3b

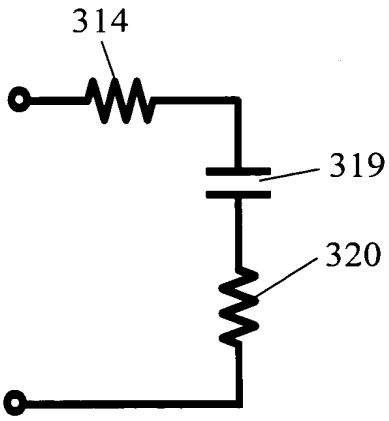

Fig. 3c

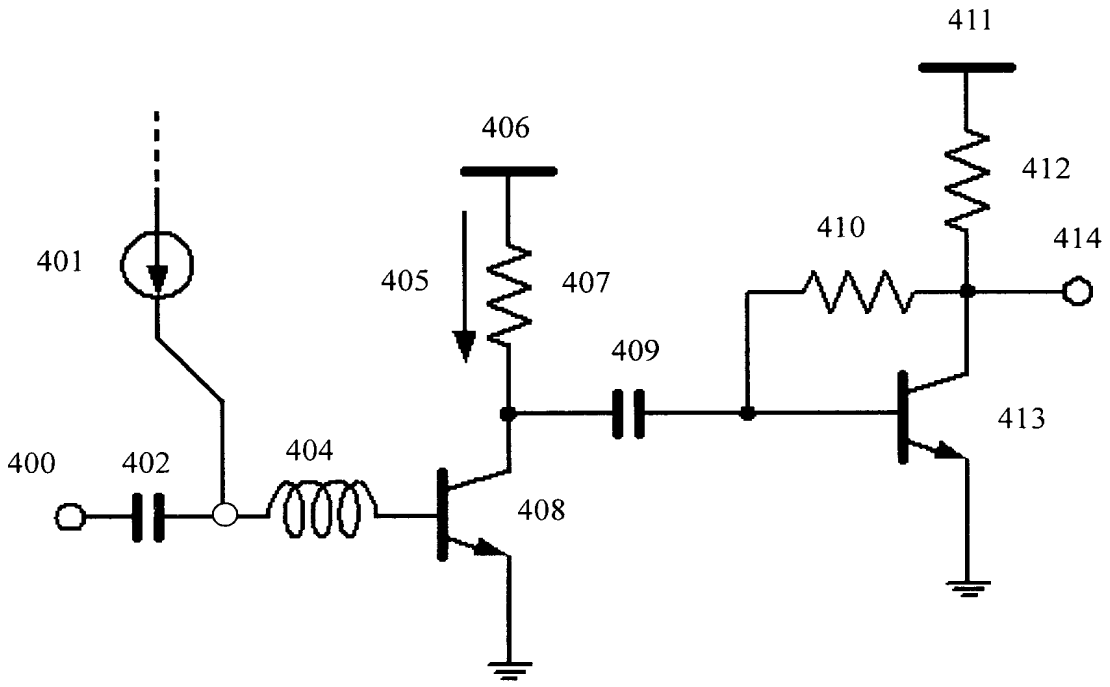

Fig. 4

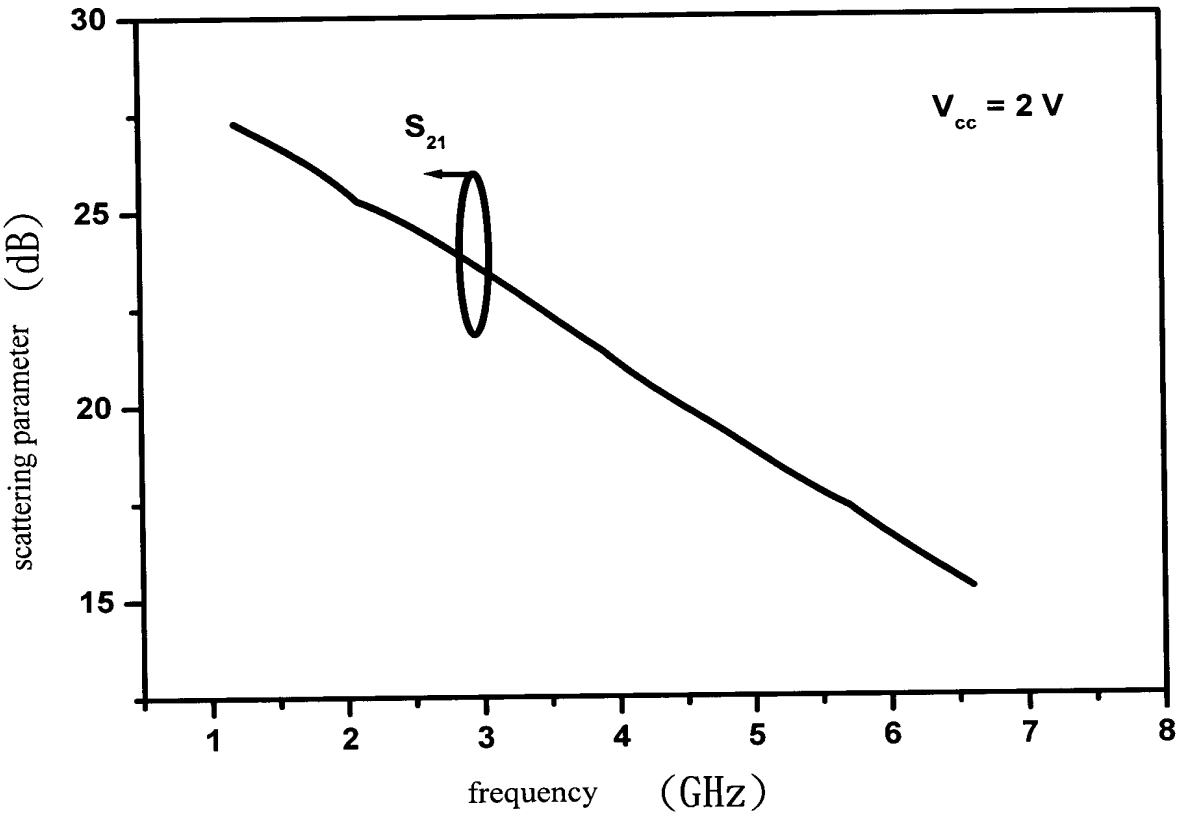
30
25
20
15
scattering parameter (dB)
S21
Vcc = 2 V
1
2
3
4
5
6
7
8
frequency (GHz)

Fig. 5

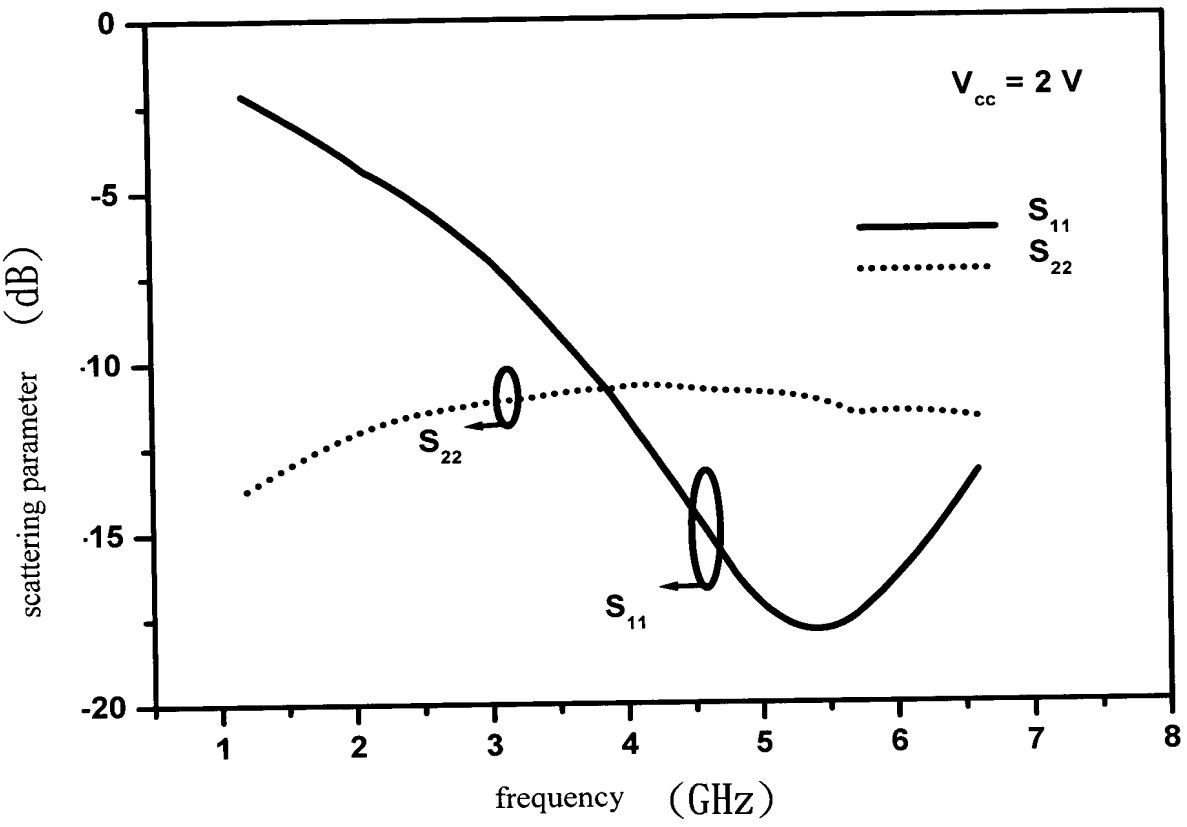
0
-5
-10
-15
-20
1
2
3
4
5
6
7
8
scattering parameter (dB)
frequency (GHz)
V_{cc} = 2 V
S_{11}
S_{22}
S_{22}
S_{11}

Fig. 6

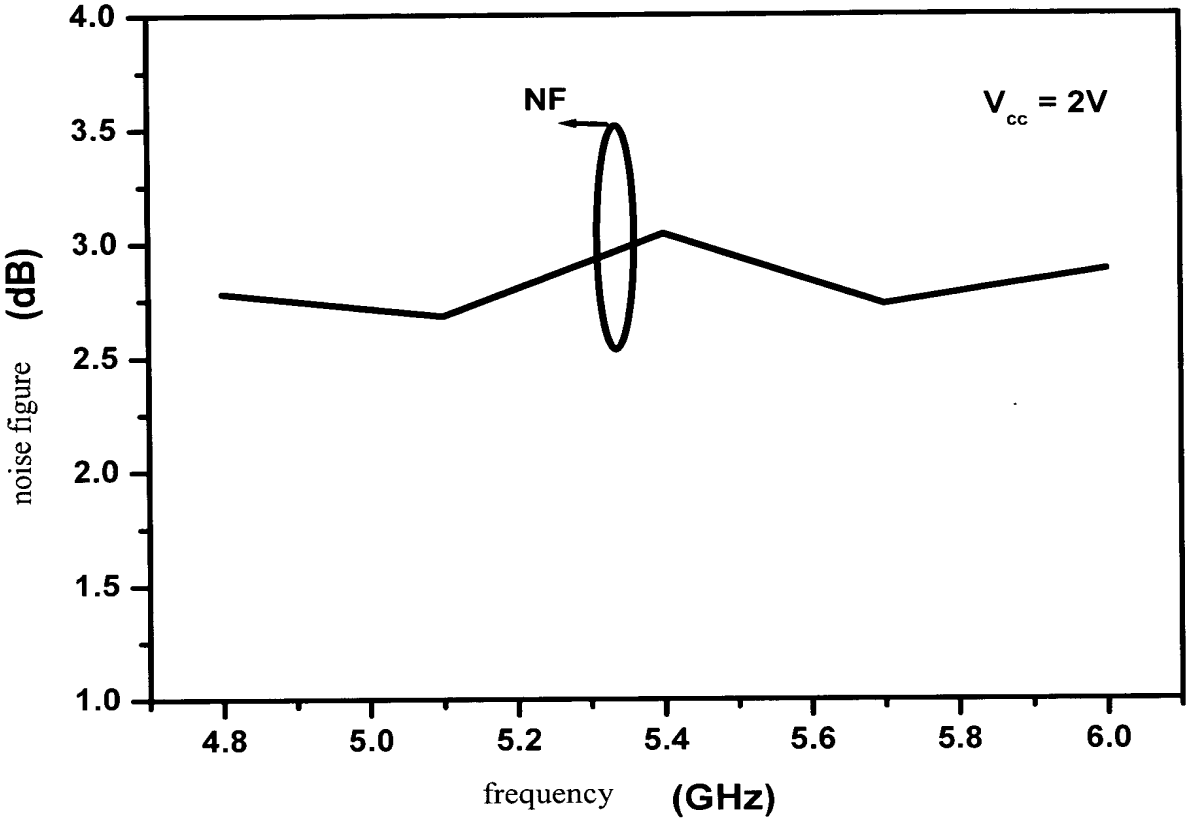
4.0
3.5
3.0
2.5
2.0
1.5
1.0
noise figure (dB)
NF
V_{cc} = 2V
4.8
5.0
5.2
5.4
5.6
5.8
6.0
frequency (GHz)

Fig. 7